



Multi-Function Device (MFD)and Printer Checklist for Sharing Peripherals Across the Network Security Technical Implementation Guide Version 1 Release 1.2

14 April 2006

Developed by DISA for the DOD

Database Reference Number:		CAT I:
Database entered by:	Date:	CAT II:
Technical Q/A by:	Date:	CAT III:
Final Q/A by:	Date:	CAT IV:
		Total:

UNCLASSIFIED UNTIL FILLED IN

CIRCLE ONE

FOR OFFICIAL USE ONLY (mark each page)

CONFIDENTIAL and SECRET (mark each page and each finding)

Classification is based on classification of system reviewed:

Unclassified System = FOUO Checklist Confidential System = CONFIDENTIAL Checklist Secret System = SECRET Checklist Top Secret System = SECRET Checklist

Enclave R	eviewer					Phone				
Previous S	RR	Y	N	Date SRR	of Previous		S01 A	vailable	Y	N
Number of	f Current (Open 1	Finding	gs						
Site Name										
Address										
TO I										
Phone										

Position	Name	Phone Number	Email	Area of Responsibility
IAM				
IAO				

Summary of Changes

14 April 2006 – Added VMS 6.0 review procedures.

14 April 2006 – Added VMS 6.0 Vulnerability Key to each checklist item.

VMS 6.0 SPAN MFD Review Procedures

The following is an outline of the process for performing a SPAN MFD review and entering the results using VMS 6.0.

- 1. Ensure that asset is registered in VMS under the correct organization. The asset will have the posture of Computing → Network → Data Network → Network Peripherals → MFD. If the asset has an identifiable operating system the posture will also include the appropriate OS.
- 2. If the asset is registered skip to Step 4 otherwise you must register the asset. You will find the appropriate selection criteria by selecting Asset Finding Maint → Assets/Findings → By Location → your location → Computing and then click on the file icon to create the asset.
- 3. On the General tab fill out the Host Name and appropriate values for the other fields on this tab.
- 4. Determine the enclave that the asset is within.
- 5. If the asset is in the correct enclave, skip to step 9.
- 6. Enter the enclave on the Systems/Enclaves tab of the asset creation / or update screen.
- 7. For registered enclaves, choose the enclave.
- 8. If the enclave is not present, contact your team lead or your IAM and report that the enclave is not present.
 - NOTE: Every effort should be made when registering or updating an asset to include the asset within an enclave.
- 9. Since at this time there is no scripted review process that automatically generates an import file, only the fields required by VMS need to be filled in unless there are other elements in the asset posture that require specific fields for their scripts. Any additional fields may be filed in for documentation purposes. The more documentation the better for identifying the system correctly.
- 10. Print the Checklist and perform a manual review for the MFD component.
- 11. Manually key results into VMS.
 - Reviewers: By navigating to the pertinent visit, selecting the asset, and expanding the appropriate element for this review. If the asset is not found in the visit, contact your Team Lead and have them enter the asset into the visit. Systems Administrators: by navigating to the your location, selecting the asset and expanding the appropriate element for review.
 - The appropriate element will be MFD.
- 12. Process any additional reviews required by additional elements within the asset posture.

MFD01.001	CAT: 2	MFD Protocol TCP/IP
8500.2 IA Control:	DCPP-1	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services
VMS Vul Key:	V0006777	
Vulnerability	A network protocol o	ther than TCP/IP is enabled on a MFD or printer.
		ber of protocols allowed active on the network the more vulnerabilities there will be available to be exploited. ne only network protocol used is TCP/IP all others are disabled.
References:	SHARING PERIPHE	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks:	SPAN MFD01.001:	The reviewer will, with the assistance of the SA, verify that the only network protocol enabled is TCP/IP.
Fix(es):	SPAN MFD01.001:	Disable all protocols in the MFD except TCP/IP.
OPE	N: NO	A FINDING: NOT REVIEWED: NOT APPLICABLE:
Notes:		
MFD01.002	CAT: 2	MFD or a printer is not using a static IP address
MFD01.002 8500.2 IA Control:	_	MFD or a printer is not using a static IP address Category: 14.2 - Protocol Security
	DCBP-1	
8500.2 IA Control: VMS Vul Key:	DCBP-1 V0006778	
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability	DCBP-1 V0006778 A MFD or a printer is Without static IP add the compromise of s	Category: 14.2 - Protocol Security not using a static IP address. lresses, if the DNS cache is poisoned (corrupted) print files containing sensitive data could be redirected, leading to
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion:	DCBP-1 V0006778 A MFD or a printer is Without static IP add the compromise of s The SA will ensure a	Category: 14.2 - Protocol Security not using a static IP address. lesses, if the DNS cache is poisoned (corrupted) print files containing sensitive data could be redirected, leading to ensitive data.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References:	DCBP-1 V0006778 A MFD or a printer is Without static IP add the compromise of s The SA will ensure a SHARING PERIPHE	Category: 14.2 - Protocol Security not using a static IP address. lresses, if the DNS cache is poisoned (corrupted) print files containing sensitive data could be redirected, leading to ensitive data. II MFDs and printers are assigned a static IP.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006778 A MFD or a printer is Without static IP add the compromise of s The SA will ensure a SHARING PERIPHE SPAN MFD01.002:	Category: 14.2 - Protocol Security s not using a static IP address. dresses, if the DNS cache is poisoned (corrupted) print files containing sensitive data could be redirected, leading to ensitive data. II MFDs and printers are assigned a static IP. RRALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006778 A MFD or a printer is Without static IP add the compromise of s The SA will ensure a SHARING PERIPHE SPAN MFD01.002: SPAN MFD01.002:	Category: 14.2 - Protocol Security In not using a static IP address. It resses, if the DNS cache is poisoned (corrupted) print files containing sensitive data could be redirected, leading to ensitive data. II MFDs and printers are assigned a static IP. IRALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE The reviewer will, with the assistance of the SA, verify that the MFD or printer is assigned a static IP address.

8500.2 IA Control: DC		MFD/Printer Firewall/Router Rule Perimeter
VMS Vul Key: V00	BP-1	Category: 14.3 - Network Device Configuration
	006779	
Vulnerability A fi	rewall or router rul	e is not used to block all ingress and egress traffic from the enclave perimeter to the MFD or printer.
Discussion: files con dep	s being sent to the npromise of sensiti oth practice. e SA will ensure the	printer from outside the enclave network could lead to a denial of service caused by a large number of large print device. Ability for the MFD or printer to access addresses outside the enclave network could lead to a ve data caused by forwarding a print file to a location outside of the enclave network. This is good defence in ere is a firewall or router rule to block all ingress and egress traffic from the enclave perimeter to the MFD or
References: SH	ARING PERIPHER	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks: SP/ from	AN MFD01.003: T in the enclave perir	he reviewer will interview the SA to verify that there is a firewall or router rule to block all ingress and egress traffic neter to the MFD or printer.
	AN MFD01.003: E D or printer.	nsure that there is a firewall or router rule to block all ingress and egress traffic from the enclave perimeter to the
OPEN:	☐ NOT	A FINDING: NOT REVIEWED: NOT APPLICABLE:
Notes:		
MFD02.001	CAT: 4	
= 0=1001	CAT: 1	MFD SNMP Community Strings
8500.2 IA Control: IAIA		MFD SNMP Community Strings Category: 14.2 - Protocol Security
	A-1: IAIA-2	, ,
8500.2 IA Control: IAIA VMS Vul Key: V00	A-1: IAIA-2 006781	, ,
8500.2 IA Control: IAIA VMS Vul Key: V00 Vulnerability The Vulnerability The Discussion: una data The	A-1: IAIA-2 006781 e default password ere are many know authorized individua a.	Category: 14.2 - Protocol Security
8500.2 IA Control: IAIA VMS Vul Key: V00 Vulnerability The Vulnerability The Discussion: una data The pas	A-1: IAIA-2 006781 e default password ere are many know authorized individua a. e SA will ensure the sswords.	Category: 14.2 - Protocol Security s and SNMP community strings of all management services have not been replaced with complex passwords. n vulnerabilities in the SNMP protocol and if the default community strings and passwords are not modified a all could gain control of the MFD or printer. This could lead to a denial of service or the compromise of sensitive
8500.2 IA Control: IAIA VMS Vul Key: V00 Vulnerability The Vulnerability Discussion: una data The pas References: SHA Checks: SPA	A-1: IAIA-2 006781 e default password ere are many know authorized individua a. e SA will ensure the swords. ARING PERIPHER	Category: 14.2 - Protocol Security s and SNMP community strings of all management services have not been replaced with complex passwords. n vulnerabilities in the SNMP protocol and if the default community strings and passwords are not modified a all could gain control of the MFD or printer. This could lead to a denial of service or the compromise of sensitive a default passwords and SNMP community strings of all management services are replaced with complex
8500.2 IA Control: IAIA VMS Vul Key: V00 Vulnerability The Vulnerability Discussion: una data The pas References: SHA Checks: SPA mail	A-1: IAIA-2 006781 e default password ere are many know authorized individua a. e SA will ensure the sswords. ARING PERIPHEF AN MFD02.001: T nagement services	Category: 14.2 - Protocol Security s and SNMP community strings of all management services have not been replaced with complex passwords. n vulnerabilities in the SNMP protocol and if the default community strings and passwords are not modified a all could gain control of the MFD or printer. This could lead to a denial of service or the compromise of sensitive default passwords and SNMP community strings of all management services are replaced with complex CALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE the reviewer will, with assistance from SA, verify that the default passwords and SNMP community strings of all
8500.2 IA Control: IAIA VMS Vul Key: V00 Vulnerability The Vulnerability Discussion: una data The pas References: SHA Checks: SPA mail	A-1: IAIA-2 006781 e default password ere are many know authorized individua a. e SA will ensure the swords. ARING PERIPHEF AN MFD02.001: T nagement services AN MFD02.001: C	Category: 14.2 - Protocol Security s and SNMP community strings of all management services have not been replaced with complex passwords. n vulnerabilities in the SNMP protocol and if the default community strings and passwords are not modified a all could gain control of the MFD or printer. This could lead to a denial of service or the compromise of sensitive default passwords and SNMP community strings of all management services are replaced with complex RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE the reviewer will, with assistance from SA, verify that the default passwords and SNMP community strings of all thave not been replaced with complex passwords. Revelop a plan to coordinate the modification of the default passwords and SNMP community strings of all

MFD02.002	CAT: 1	MFD Configuration State After Power Down or Reboot
8500.2 IA Control:	DCSS-1: DCSS-2	Category: 2.1 - Object Permissions
VMS Vul Key:	V0006782	
Vulnerability	The MFD does not m	naintain its configuration state (passwords, service settings etc) after a power down or reboot.
	mitigated by the mod	maintain it state over a power down or reboot, it will expose the network to all of the vulnerabilities that where diffications made to its configuration state. The MFD maintains its configuration state (passwords, service settings etc.) after a power down or reboot.
References:	SHARING PERIPHE	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks:		Interview the SA and review the MFD documentation to verify that the MFD will maintain its configuration state settings etc) after a power down or reboot.
Fix(es):	SPAN MFD02.002: power down or reboo	Replace the MFD with a MFD that will maintain its configuration state (passwords, service settings etc) after a ot.
OPE	:N:	T A FINDING: NOT REVIEWED: NOT APPLICABLE:
Notes:		
MFD02.003	CAT: 2	MFD Management Protocols
8500.2 IA Control:	DCPP-1	MFD Management Protocols Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services
8500.2 IA Control: VMS Vul Key:	DCPP-1 V0006783	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services
8500.2 IA Control: VMS Vul Key:	DCPP-1 V0006783 All management prof	•
8500.2 IA Control: VMS Vul Key: Vulnerability	DCPP-1 V0006783 All management prot firmware or configure	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services tocols, with the exception of HTTPS and SNMPv3, are not disabled all times except when necessary to upgrade
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion:	DCPP-1 V0006783 All management prof firmware or configure Unneeded protocols	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services tocols, with the exception of HTTPS and SNMPv3, are not disabled all times except when necessary to upgrade at the device. Or, all other management services such as DHCP, SMTP, and BOOTP are not disabled at all times.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References:	DCPP-1 V0006783 All management proffirmware or configure Unneeded protocols SHARING PERIPHE SPAN MFD02.003: and SNMPv3, are no	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services tocols, with the exception of HTTPS and SNMPv3, are not disabled all times except when necessary to upgrade at the device. Or, all other management services such as DHCP, SMTP, and BOOTP are not disabled at all times. expose the device and the network to unnecessary vulnerabilities.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCPP-1 V0006783 All management profirmware or configure Unneeded protocols SHARING PERIPHE SPAN MFD02.003: and SNMPv3, are no management service	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services tocols, with the exception of HTTPS and SNMPv3, are not disabled all times except when necessary to upgrade the device. Or, all other management services such as DHCP, SMTP, and BOOTP are not disabled at all times. expose the device and the network to unnecessary vulnerabilities. ERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE The reviewer will, with the assistance of the SA, verify that all management protocols, with the exception of HTTPS of disabled all times except when necessary to upgrade firmware or configure the device. In addition, all other
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCPP-1 V0006783 All management prof firmware or configure Unneeded protocols SHARING PERIPHE SPAN MFD02.003: and SNMPv3, are no management service SPAN MFD02.003:	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services tocols, with the exception of HTTPS and SNMPv3, are not disabled all times except when necessary to upgrade the device. Or, all other management services such as DHCP, SMTP, and BOOTP are not disabled at all times. expose the device and the network to unnecessary vulnerabilities. ERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE The reviewer will, with the assistance of the SA, verify that all management protocols, with the exception of HTTPS of disabled all times except when necessary to upgrade firmware or configure the device. In addition, all other as such as DHCP, SMTP, and BOOTP are disabled at all times.

8500.2 IA Control: \	CAT: 2	MFD Firmware
	VIVM-1	Category: 3.2 - Operational / PM Patches
VMS Vul Key: \	V0006780	
Vulnerability /	A MFD or a printer de	evice is not flash upgradeable or is not configured to use the most current firmware available.
Discussion: o	compromise of sensi	ers utilizing old firmware can expose the network to known vulnerabilities leading to a denial of service or a tive data. evices are flash upgradeable and are configured to use the most current firmware available
References: S	SHARING PERIPHE	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
	SPAN MFD02.004: use the most current	The reviewer will, with the assistance of the SA, verify that the devices are flash upgradeable and are configured to firmware available.
Fix(es): S	SPAN MFD02.004:	If the MFD or printer cannot be upgraded replace it.
l	•	can be upgraded but is not using the latest release of the firmware, upgrade the firmware.
OPEN	N: NO1	A FINDING: NOT REVIEWED: NOT APPLICABLE:
Notes:		
MFD02.005	CAT: 1	MFD or a printer can be managed from any IP
8500.2 IA Control: [DCBP-1	Category: 2.1 - Object Permissions
VMS Vul Key: \	V0006784	
Vulnerability 7	There is no restriction	n on where a MFD or a printer can be remotely managed.
Discussion: a s 1	addresses decreases service or a compror	scess to the MFD or printer for management is not required the restricting the management interface to specific IP is the exposure of the system to malicious actions. If the MFD or printer is compromised it could lead to a denial of this ensitive data. Evices can only be remotely managed by SA's or printer administrators from specific IPs (SA workstations and
ŀ	Jilit spooler).	
	. ,	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
References: S	SHARING PERIPHE SPAN MFD02.005: SA or printer adminis	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE The reviewer will, with the assistance of the SA, verify that the MFD or printer can only be remotely managed by strator from specific IPs (SA workstations and print spooler). Look for list that restricts the protocol used for s to specific IP addresses.
References: S Checks: S S Fix(es): S	SHARING PERIPHE SPAN MFD02.005: SA or printer administrative acces SPAN MFD02.005: this functionality use	The reviewer will, with the assistance of the SA, verify that the MFD or printer can only be remotely managed by strator from specific IPs (SA workstations and print spooler). Look for list that restricts the protocol used for
References: S Checks: S S Fix(es): S	SHARING PERIPHE SPAN MFD02.005: SA or printer adminis administrative acces SPAN MFD02.005: his functionality use	The reviewer will, with the assistance of the SA, verify that the MFD or printer can only be remotely managed by strator from specific IPs (SA workstations and print spooler). Look for list that restricts the protocol used for s to specific IP addresses. Restrict access to the MFD's or printer's management function to a specific set of IP addresses. If the device lacks an ACL in a router, firewall or switch to restrict the access.

	CAT: 3	Print Services Restricted to Port 9100 and/or LPD	
3500.2 IA Control:	DCBP-1	Category: 14.3 - Network Device Configuration	
VMS Vul Key:	V0006790		
Vulnerability	Print services for a M	MFD or printer are not restricted to Port 9100 and/or LPD (Port 515).	
	Where both Windows simultaneously.	s and non-Windows clients need services from the same device, both Port 9100 and LPD can be enabled	
		ing on ports other than the known ports for printing cannot be monitored on the network and could lead to a der id port is blocked by a network administrator responding to an alert from the IDS for traffic on an unauthorized p	
References:	SHARING PERIPHEI	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE	
Checks:	SPAN MFD03.001: T port 9100.	The reviewer will, with the assistance of the SA, verify that the MFD or printer print services are restricted to LP	D or
	Where both Windows simultaneously.	s and non-Windows clients need services from the same device, both Port 9100 and LPD can be enabled	
Fix(es):		Develop a plan to coordinate the reconfiguration of the printer servers and clients so that print services runs on Obtain CM approval of the plan and implement the plan.	ly
OPE	N: NOT	TA FINDING: NOT REVIEWED: NOT APPLICABLE:]
Notes:			
/IFD04.001	CAT: 2	MFD/Printer Restrict Jobs Only From Print Spooler	
		, ,	
3500.2 IA Control:		Category: 2.1 - Object Permissions	
3500.2 IA Control: VMS Vul Key:	DCBP-1	·	
VMS Vul Key:	DCBP-1 V0006794	·	
VMS Vul Key: Vulnerability Vulnerability	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be crea	Category: 2.1 - Object Permissions	iial
VMS Vul Key: Vulnerability Vulnerability	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be crea The SA will ensure M The configuration is a	Category: 2.1 - Object Permissions s not configured to restrict jobs to those from print spoolers. re not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a dereated by the MFD or printer accepting one or more large print jobs from an unauthorized user. MFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is edevice, or if not supported, by placing the device behind a firewall, switch or router with an appropriate	nial
VMS Vul Key: Vulnerability Vulnerability Discussion:	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be created the SA will ensure M The configuration is a accomplished on the discretionary access	Category: 2.1 - Object Permissions s not configured to restrict jobs to those from print spoolers. re not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a dereated by the MFD or printer accepting one or more large print jobs from an unauthorized user. MFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is edevice, or if not supported, by placing the device behind a firewall, switch or router with an appropriate	nial
Vulnerability Vulnerability Discussion: References:	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be crea The SA will ensure M The configuration is a accomplished on the discretionary access SHARING PERIPHEI	Category: 2.1 - Object Permissions a not configured to restrict jobs to those from print spoolers. The not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a derested by the MFD or printer accepting one or more large print jobs from an unauthorized user. AFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. Accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is a device, or if not supported, by placing the device behind a firewall, switch or router with an appropriate control list. ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to only printers.	
VMS Vul Key: Vulnerability Vulnerability Discussion:	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be created to the SA will ensure M The configuration is a accomplished on the discretionary access SHARING PERIPHEI SPAN MFD04.001: Tprint spoolers, not directly the configuration is a	Category: 2.1 - Object Permissions In not configured to restrict jobs to those from print spoolers. The not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a derested by the MFD or printer accepting one or more large print jobs from an unauthorized user. MFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. The accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is a device, or if not supported, by placing the device behind a firewall, switch or router with an appropriate control list. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users.	
VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be crea The SA will ensure M The configuration is a accomplished on the discretionary access of SPAN MFD04.001: To print spoolers, not dire the configuration is a accomplished on the discretionary access of SPAN MFD04.001: F	Category: 2.1 - Object Permissions In not configured to restrict jobs to those from print spoolers. The not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a derested by the MFD or printer accepting one or more large print jobs from an unauthorized user. MFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. The accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is a device, or if not supported, by placing the device behind a firewall, switch or router with an appropriate control list. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users.	
VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006794 A MFD or a printer is If MFDs or printers ar of service can be created to the SA will ensure M The configuration is a accomplished on the discretionary access SHARING PERIPHEI SPAN MFD04.001: To print spoolers, not directly the configuration is a accomplished on the discretionary access SPAN MFD04.001: SPAN MFD04.001: SPAN MFD04.001: Support this functional accomplished on the discretionary access of support this functional accomplished on the support this function accomplished on the support this support thi	Category: 2.1 - Object Permissions a not configured to restrict jobs to those from print spoolers. The not restricted to only accepting print jobs from print spoolers that authenticate the user and log the job, a dereated by the MFD or printer accepting one or more large print jobs from an unauthorized user. MFDs and printers are configured to restrict jobs to only print spoolers, not directly from users. The accomplished by restricting access, by IP, to those of the print spooler and SAs. If supported, IP restriction is a device, or if not supported, by placing the device behind a firewall, switch or router with an appropriate control list. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to derectly from users. The reviewer will, with the assistance of the SA, verify that MFDs and printers are configured to restrict jobs to device or if not supported, by placing the device behind a firewall, switch or router with an appropriate control list. The reviewer will, with the device to restrict access, by IP, to those of the print spoolers and SAs. If the device does not accomplished by restriction to restrict access, by IP, to those of the print spoolers and SAs. If the device does not accomplished by restriction to restrict access, by IP, to those of the print spoolers and SAs. If the device does not accomplished by restriction is the device does not accomplished by restriction access.	

MFD05.001

MFD05.001	CAT: 2	MFD Authorized Users Restrictions
8500.2 IA Control:	ECAN-1: IAIA-1: IAIA-	-2 Category: 2.1 - Object Permissions
VMS Vul Key:	V0006796	
Vulnerability	Print spoolers are no	t configured to restrict access to authorized users and restrict users to managing their own individual jobs.
	If users are not restrict existing files or deleting	are allowed access to the print spooler they can queue large print file creating a denial of service for other users. ted to manipulating only files they created, they could create ad denial of service by changing the print order of an other users files. In the spoolers are configured to restrict access to authorized user and restrict users to managing their own individual
References:	SHARING PERIPHER	RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks:		he reviewer will, with the assistance of the SA, verify that the print spoolers are configured to restrict access to restrict users to managing their own individual jobs.
Fix(es):	SPAN MFD05.001: Cindividual jobs.	Configure the print spoolers to restrict access to authorized users and restrict users to managing their own
OPE Notes:		
Notes:	CAT: 2	MED and Spooler Auditing
Notes:	CAT: 2	MFD and Spooler Auditing
Notes: MFD06.001 8500.2 IA Control:	ECAR-1: ECAR-2: EC	
Notes: MFD06.001 8500.2 IA Control: VMS Vul Key:	ECAR-1: ECAR-2: EC V0006797	CAR-3 Category: 10.1 - Procedures
MFD06.001 8500.2 IA Control: VMS Vul Key: Vulnerability	ECAR-1: ECAR-2: EC V0006797 The devices and their	
Notes: MFD06.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion:	ECAR-1: ECAR-2: EC V0006797 The devices and their Without auditing the id	CAR-3 Category: 10.1 - Procedures spoolers do not have auditing enabled.
Notes: MFD06.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References:	ECAR-1: ECAR-2: ECV0006797 The devices and their Without auditing the ic	CAR-3 Category: 10.1 - Procedures spoolers do not have auditing enabled. dentification and prosecution of an individual that performs malicious actions is difficult if not impossible.
Notes: MFD06.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	ECAR-1: ECAR-2: ECV0006797 The devices and their Without auditing the id SHARING PERIPHER SPAN MFD06.001: T	CAR-3 Category: 10.1 - Procedures spoolers do not have auditing enabled. dentification and prosecution of an individual that performs malicious actions is difficult if not impossible. RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Notes: MFD06.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	ECAR-1: ECAR-2: ECV0006797 The devices and their Without auditing the id SHARING PERIPHER SPAN MFD06.001: T SPAN MFD06.001: C	CAR-3 Category: 10.1 - Procedures spoolers do not have auditing enabled. dentification and prosecution of an individual that performs malicious actions is difficult if not impossible. RALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE the reviewer will, with the assistance of the SA, verify that devices and their spoolers have auditing fully enabled.

MFD06.002	CAT: 3 MFD/Printer Security Policy
8500.2 IA Control:	DCBP-1: ECAN-1: ECIC-1: IAIA-1: IAIA-2: PECS-1: Category: 11.4 - Disposition PECS-2: PEDD-1
VMS Vul Key:	V0006798
Vulnerability	There is no security policy containing the requirements found in the SPAN STIG.
	Acceptable use of device storage and retransmission of data (DODD 5200.1-R, Appendix G) Verification that devices are not being shared on networks of different classification levels. Procedures for scrubbing or disposing of hard disks when devices are sent out for repair or disposal. Defined protocols for the maintenance, disposal, and purging of classified devices to include their non-volatile memory and storage devices. Defined protocols for acceptable key operator codes, administration passwords, user codes, which personnel can change them, how often, format and storage of codes, and passwords.
	These policies are designed to raise the overall awareness of security practices and procedures. Failure to follow them can lead to the compromise of sensitive data.
	The IAO will ensure implementation of a MFD and printer security policy to include:
	Acceptable use of device storage and retransmission of data (DODD 5200.1-R, Appendix G) Verification that devices are not being shared on networks of different classification levels. Procedures for scrubbing or disposing of hard disks when devices are sent out for repair or disposal. Defined protocols for the maintenance, disposal, and purging of classified devices to include their non-volatile memory and storage devices. Defined protocols for acceptable key operator codes, administration passwords, user codes, which personnel can change them, how often, format and storage of codes, and passwords.
References:	SHARING PERIPHERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks:	SPAN MFD06.002: Interview the IAO to verify that there is a security policy that meets the requirements of the SPAN STIG implemented.
Fix(es):	SPAN MFD06.002: Implement a MFD and printer security policy in accordance with the SPAN STIG.
OPE	N: NOT A FINDING: NOT REVIEWED: NOT APPLICABLE:

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MFD06.006	CAT: 3	MFD Level of A	udit and Re	eviewing
8500.2 IA Control:	ECAR-1: ECAR-2: E	CAR-3: ECAT-1: ECAT-2	Category:	10.2 - Content Configuration
VMS Vul Key:	V0006799			
Vulnerability	The level of audit ha being reviewed.	s not been established by the	e IAO or the audi	its logs being collected for the devices and print spoolers are not
	are not regularly rev	ation is captured in the audit, iewed suspicious activity may a level of auditing to perform	go undetected f	
References:	SHARING PERIPHE	ERALS ACROSS THE NETW	ORK SECURITY	Y TECHNICAL IMPLEMENTATION GUIDE
Checks:	SPAN MFD06.006: being reviewed.	The reviewer will interview th	e IAO to verify th	nat the level of auditing has been established and that audit logs are
	baseline should be t		incident. Ensure	swords, enabled features and services. Any deviation from the e operational security controls are in place to ensure servicing of d configuration protocols.
Fix(es):	SPAN MFD06.006: ensure regular revie		in accordance w	with the requirements in the SPAN STIG and establish a procedure t
ОРЕ	N: NO	Γ A FINDING:	NOT RE	VIEWED: NOT APPLICABLE:
Notes:				
Notes:				
Notes:				
Notes: MFD07.001	CAT: 1	MFD Classified	Network	
		MFD Classified		9.1 - SABI
MFD07.001	DCBP-1	MFD Classified		9.1 - SABI
MFD07.001 8500.2 IA Control: VMS Vul Key:	DCBP-1 V0006800		Category:	9.1 - SABI networks without the approved of the DAA.
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability	DCBP-1 V0006800 MFDs with copy, sca MFDs with copy, sca network.	an, or fax capability are allow	Category: ed on classified r	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion:	DCBP-1 V0006800 MFDs with copy, scanetwork. The IAO will ensure	an, or fax capability are allow an, or fax capabilities if compl MFDs with copy, scan, or fax	Category: ed on classified r romised could lea	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the ot allowed on classified networks unless approved by the DAA.
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References:	DCBP-1 V0006800 MFDs with copy, scanetwork. The IAO will ensure SHARING PERIPHE SPAN MFD07.001:	an, or fax capability are allowers, or fax capabilities if compositions with copy, scan, or fax ERALS ACROSS THE NETW	Category: ed on classified r romised could lea capability are no ORK SECURITY the IAO to verify the	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006800 MFDs with copy, scanetwork. The IAO will ensure SHARING PERIPHE SPAN MFD07.001: classified networks to	an, or fax capability are allowers, or fax capabilities if compositions with copy, scan, or fax ERALS ACROSS THE NETW	Category: ed on classified r romised could lea capability are no PORK SECURITY the IAO to verify the	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the ot allowed on classified networks unless approved by the DAA. Y TECHNICAL IMPLEMENTATION GUIDE nat MFDs with copy, scan or fax capabilities are not allowed on
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006800 MFDs with copy, scanetwork. The IAO will ensure SHARING PERIPHE SPAN MFD07.001: classified networks to	an, or fax capability are allowed an, or fax capabilities if composition MFDs with copy, scan, or fax ERALS ACROSS THE NETW The reviewer will interview the unless approved by the DAA.	Category: ed on classified r romised could lea capability are no ORK SECURITY the IAO to verify the	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the ot allowed on classified networks unless approved by the DAA. Y TECHNICAL IMPLEMENTATION GUIDE nat MFDs with copy, scan or fax capabilities are not allowed on
MFD07.001 8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks: Fix(es):	DCBP-1 V0006800 MFDs with copy, scanetwork. The IAO will ensure SHARING PERIPHE SPAN MFD07.001: classified networks to	an, or fax capability are allowers, or fax capabilities if compositions of fax capabilities if compositions with copy, scan, or fax ERALS ACROSS THE NETW. The reviewer will interview the unless approved by the DAA. Remove the MFD from the contractions of the capabilities.	Category: ed on classified r romised could lea capability are no ORK SECURITY the IAO to verify the	networks without the approved of the DAA. ad to the compromise of classified data or the compromise of the ot allowed on classified networks unless approved by the DAA. Y TECHNICAL IMPLEMENTATION GUIDE nat MFDs with copy, scan or fax capabilities are not allowed on stor obtain DAA approval.

MFD07.002 CAT: 2 MFD Clearing Disk Space Scan to Disk 8500.2 IA Control: ECRC-1 Category: 11.4 - Disposition VMS Vul Key: V0006801 Vulnerability A MFD device, with scan to hard disk functionality used, is not configured to clear the hard disk between jobs. Vulnerability If the MFD is compromised the un-cleared, previously used, space on the hard disk drive can be read which can lead to a compromise Discussion: of sensitive data. The SA will ensure the device is configured to clear the hard disk between jobs if scan to hard disk functionality is used. References: SHARING PERIPHERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE Checks: SPAN MFD07.002: The reviewer, with the assistance of the SA, verify the device is configured to clear the hard disk between jobs if scan to hard disk functionality is used. Fix(es): SPAN MFD07.002: Configured the MFD to clear the hard disk between jobs if scan to hard disk functionality is used. **NOT A FINDING:** OPEN: **NOT REVIEWED: NOT APPLICABLE:** Notes: MFD07.003 CAT: 3 **MFD Scan Discretionary Access Control** 8500.2 IA Control: ECAN-1 Category: 2.1 - Object Permissions VMS Vul Key: V0006802 Vulnerability Scan to a file share is enabled but the file shares do not have the appropriate discretionary access control list in place. Vulnerability Without appropriate discretionary access controls unauthorized individuals may read the scanned data. This can lead to a compromise The SA will ensure file shares have the appropriate discretionary access control list in place if scan to a file share is enabled. References: SHARING PERIPHERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE Checks: SPAN MFD07.003: The reviewer will, with the assistance of the SA, verify that file shares have the appropriate discretionary access control list in place if scan to a file share is enabled. Fix(es): SPAN MFD07.003: Create the appropriate discretionary access control list for file shares if scan to a file share is enabled. OPEN: NOT A FINDING: NOT REVIEWED: NOT APPLICABLE: Notes:

MFD07.004	CAT: 3	MFD Fax from	Network Auditing
8500.2 IA Control:	ECAR-1: ECAR-2: E	CAR-3	Category: 10.2 - Content Configuration
VMS Vul Key:	V0006803		
Vulnerability	Fax from the network	s is enabled but auditing of	user access and fax log is not enabled.
	compromises sensiti	ve data via a fax will be hin	of a fax cannot be determined. Prosecuting of an individual who maliciously indered without audits. fax log is enabled if fax from the network is enabled.
References:	SHARING PERIPHE	RALS ACROSS THE NET	WORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
Checks:	SPAN MFD07.004: the network is enable		assistance of the SA, verify that auditing of user access and fax log is enabled if fax from
Fix(es):		Configure the MFD to audit connect the phone line from	t faxing in accordance with the SPAN STIG. If this is not possible, disable the fax n the MFD.
ОРЕ	:N:	A FINDING:	NOT REVIEWED: NOT APPLICABLE:
Notes:			
MFD07.005	CAT: 2	MFD Scan to S	SMTP (email)
MFD07.005 8500.2 IA Control:		MFD Scan to S	MTP (email) Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services
	DCBP-1	MFD Scan to S	` ,
8500.2 IA Control: VMS Vul Key:	DCBP-1		` ,
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability	DCBP-1 V0006804 Devices allow scan t The SMTP engines f scan to email. Beca could lead to an untr	o SMTP (email). ound on the MFDs reviewe use of the lack of robust se	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services ed when writing the SPAN STIG did not have robust enough security features supporting ecurity scan to email will be disabled on MFD devices. Failure to disable this feature stectable compromise of sensitive data.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion:	DCBP-1 V0006804 Devices allow scan t The SMTP engines f scan to email. Beca could lead to an untr The SA will ensure d	o SMTP (email). ound on the MFDs reviewe use of the lack of robust se aceable and possibly unde evices do not allow scan to	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services ed when writing the SPAN STIG did not have robust enough security features supporting ecurity scan to email will be disabled on MFD devices. Failure to disable this feature stectable compromise of sensitive data.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References:	DCBP-1 V0006804 Devices allow scan t The SMTP engines f scan to email. Beca could lead to an untr The SA will ensure d SHARING PERIPHE	o SMTP (email). ound on the MFDs reviewe use of the lack of robust se aceable and possibly unde evices do not allow scan to RALS ACROSS THE NET	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services ed when writing the SPAN STIG did not have robust enough security features supporting scurity scan to email will be disabled on MFD devices. Failure to disable this feature tectable compromise of sensitive data.
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006804 Devices allow scan t The SMTP engines f scan to email. Beca could lead to an untr The SA will ensure d SHARING PERIPHE SPAN MFD07.005:	o SMTP (email). ound on the MFDs reviewe use of the lack of robust se aceable and possibly unde evices do not allow scan to RALS ACROSS THE NET	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services ed when writing the SPAN STIG did not have robust enough security features supporting courity scan to email will be disabled on MFD devices. Failure to disable this feature stectable compromise of sensitive data. o SMTP. WORK SECURITY TECHNICAL IMPLEMENTATION GUIDE
8500.2 IA Control: VMS Vul Key: Vulnerability Vulnerability Discussion: References: Checks:	DCBP-1 V0006804 Devices allow scan t The SMTP engines f scan to email. Becal could lead to an untr The SA will ensure d SHARING PERIPHE SPAN MFD07.005:	o SMTP (email). ound on the MFDs reviewe use of the lack of robust se aceable and possibly unde evices do not allow scan to RALS ACROSS THE NET	Category: 14.4 - Unneeded Ports, Protocols, Hardware, and Services ed when writing the SPAN STIG did not have robust enough security features supporting courity scan to email will be disabled on MFD devices. Failure to disable this feature stectable compromise of sensitive data. o SMTP. WORK SECURITY TECHNICAL IMPLEMENTATION GUIDE assistance of the SA, verify that devices do not allow scan to SMTP.

MFD08.001	CAT: 2	MFD Hard Drive Lock
8500.2 IA Control:	PECF-1: PECF-2	Category: 5.9 - Device Locations
VMS Vul Key:	V0006805	
Vulnerability	A MFD device does not have a mechanism to lock and prevent access to the hard drive.	
	If the hard disk drive of a MFD can be removed from the MFD the data on the drive can be recovered and read. This can lead to a compromise of sensitive data.	
	The IAO will ensure the device has a mechanism to lock and prevent access to the hard disk.	
References:	SHARING PERIPHERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE	
Checks:	SPAN MFD08.001: The reviewer will, with the assistance of the SA, verify that the device has a mechanism to lock and prevent access to the hard disk.	
	What we are looking will be locked or this	for here is a locking mechanism with a key securing the hard drive or the case access to the hard drive. The lock is a finding.
Fix(es):	SPAN MFD08.001:	If the lock is not locked, lock it.
	If there is no lock see if the vendor makes one and if so acquire it an lock the drive. If the vendor does not supply a lock, acquire an aftermarket lock that will secure the drive so that it cannot be accessed. Even a drive that cannot be removed but the connectors can be removed is vulnerable.	
Notes:	N: NO	A FINDING: NOT REVIEWED: NOT APPLICABLE:
MFD08.002	CAT: 1	MFD/Printer Global Configuration Settings
8500.2 IA Control:	ECAN-1	Category: 2.1 - Object Permissions
VMS Vul Key:	V0006806	
Vulnerability	The device is not configured to prevent non-printer administrators from altering the global configuration of the device.	
	If unauthorized users can alter the global configuration of the MFD they can remove all security. This can lead to the compromise of sensitive data or the compromise of the network the MFD is attached to.	
References:	SHARING PERIPHERALS ACROSS THE NETWORK SECURITY TECHNICAL IMPLEMENTATION GUIDE	
Checks:	SPAN MFD08.002: The reviewer will, with the assistance of the SA, verify that the device is configured to prevent non-printer administrators from altering the global configuration of the device.	
Fix(es):	SPAN MFD08.002: Configured the device to prevent non-printer administrators from altering the global configuration of the device. If the device cannot be configured in this manner, replace the device with one that can be configured in an acceptable manner.	
OPEN: NOT A FINDING: NOT REVIEWED: NOT APPLICABLE:		
Notes:		